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3/23/00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PC Code No: 128857
DP Barcode: D264199

Section 18 Review

DATE: March 23, 2000

SUBJECT: Myclobutanil (NOVA 40W) on Cucurbits in Texas

FROM: Thuy Nguyen, MS, Chemist
Environmental Risk Branch III
Environmental Fate and Effects Division (7507C)

THRU: for Daniel Rieder, Chief
Environmental Risk Branch III
Environmental Fate and Effects Division (7507C)

TO: Robert Forrest, Product Manager
Dan Rosenblatt
Registration Division (7505C)

EFED/ERB III has completed a review of the emergency exemption request for the use of myclobutanil (NOVA 40W fungicide) on cucurbits in Texas, and concludes that the proposed use of myclobutanil does not appear to pose adverse effects to birds, fish, small mammals or aquatic invertebrates. Risks to terrestrial species of plants and non-target insects could not be assessed due to lack of adequate data; therefore, risks to plants and non-target insects remain a possibility and could be minimized by taking precautions to reduce spray drift.

The Texas Department of Agriculture has requested an emergency exemption for the use of myclobutanil to control powdery mildew on approximately 90,000 acres of cucurbits grown in that state. Applications could be either by ground or by aerial equipment, at a proposed rate of 0.063 - 0.125 lb ai/acre, not to exceed 0.6 lbs ai/acre per year, and at 7 to 10 day intervals.

The risks associated with the proposed new use on cucurbits are based on the risks recently assessed for myclobutanil use on asparagus in the "Review of New Uses for Myclobutanil" report (Mary Waller/Thuy Nguyen, February 07, 2000 (D260065 /D260111)). According to this report, myclobutanil is applied on asparagus at a rate of 0.125 lb ai/acre, 6 applications per year, with 14 days between application. The asparagus use, which had similar application rate as cucurbits but higher number of applications per year, did not trigger any LOC exceedance for birds, fish, small mammals or aquatic invertebrates. The difference in application intervals should not effect this risk assessment to a great extent, as myclobutanil is a relatively stable chemical with low leaching potential. Therefore, it is reasonable to assume that minimal risks are expected from the proposed new use of myclobutanil on cucurbits in Texas. Drinking water assessment previously reported on hops is applicable to this proposed new use.

2014124

DP BARCODE: D264199

CASE: 292720 DATA PACKAGE RECORD DATE: 03/20/00
SUBMISSION: S576074 BEAN SHEET Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: EMERGENCY EXEMP ACTION: 510 SEC18-OC F/F USE
RANKING : 0 POINTS ()
CHEMICALS: 128857 Myclobutanil (ANSI) %

ID#: 00TX0009
COMPANY:
PRODUCT MANAGER: 05 ROBERT FORREST 703-308-9376 ROOM: CM2 248
PM TEAM REVIEWER: DAN ROSENBLATT 703-308-9375 ROOM: CM2 280
RECEIVED DATE: 02/29/00 DUE OUT DATE: 04/19/00

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 264199 EXPEDITE: N DATE SENT: 03/20/00 DATE RET.: / /
CHEMICAL: 128857 Myclobutanil (ANSI)
DP TYPE: 001
CSF: N LABEL: Y

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	03/20/00	03/24/00
BRAN: ERB3	03/20/00	03/24/00
SECT:	03/20/00	03/24/00
REVR : Thuy N.	03/20/00	03/24/00
CONTR:	/ /	/ /

ADMIN DUE DATE: 04/09/00
NEGOT DATE: / /
PROJ DATE: / /

* * * DATA REVIEW INSTRUCTIONS * * *

To EFED --

Please review this section 18 request for the use of myclobutanil and triflumizole on cucurbits in Texas.

Thanks,

Dan Rosenblatt

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
264197	APPB	03/20/00	04/09/00	Y	N	Y
264198	EAB	03/20/00	04/09/00	Y	N	Y
264200		03/20/00	04/09/00	Y	N	Y

Copy delivered to ERI with Separate Bean # D264195 8/25/00

9/28/00

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PC Code No: 128857
DP Barcode: D269104

Section 18 Review

DATE: September 28, 2000

SUBJECT: Myclobutanil (Laredo® 2EC Fungicide) on Sugar beets in Idaho
Rohm and Hass Company

FROM: Thuy Nguyen, MS, Chemist
ERB III / Environmental Fate and Effects Division (7507C)

THRU: Arnet Jones, Branch Chief
ERB III / Environmental Fate and Effects Division (7507C)
9/28/00

TO: Robert Forrest, Product Manager
David Deegan, PM Team Reviewer
Registration Division (7505C)

Summary of Conclusions

EFED/ERB III has completed reviewing the emergency exemption request for the use of myclobutanil on sugar beets in Idaho, and concludes that this use should not pose significant adverse effects to birds, fish, small mammals, and aquatic invertebrates, including endangered species. Risks to terrestrial plants and non-target insects could not be assessed due to lack of adequate data; therefore, risks to these species groups remain a possibility and could be minimized by reducing spray drift. Water resources assessment previously reported for hops could be applicable to this proposed new use pattern.

Background

The Idaho Department of Agriculture has requested an emergency exemption for the use Laredo® 2EC fungicide (EPA registration #707-222) to control powdery mildew on 50,000 acres of sugar beets grown in that state. The active ingredient of this fungicide is myclobutanil 25% (2 lbs ai/gallon). The period of time for which this use is requested is August 10, 2000 to September 15, 2001. Applications could be made either by ground or by aerial equipment, at a proposed rate of 0.125 lb ai/acre/application, with a maximum of 2 applications per season and 10-14 day interval between application. No application may be made within 14 days of harvest. This is the first section 18 request from any state for myclobutanil use on sugar beets.

Environmental Fate Summary

Myclobutanil is persistent in water and moderately persistent in soil. Previously submitted

fate studies indicate that myclobutanil is stable to hydrolysis and to photolysis in water. However, it will photodegrade slowly in soil ($t_{1/2}$ = 143 days). The aerobic metabolism half-life values were reported at 61 to 71 days, and the terrestrial field dissipation at 92 to 292 days.

Myclobutanil has low to medium mobility in soils as indicated by its K_{oc} values (from 224 for clay loam to 919 for silty clay) and the McCall classification. 1,2,4 triazole (myclobutanil major degradate) possesses lower K_{oc} values than the parent, thus suggesting higher mobility. However, a review of the adsorption (average $K_a$ads of 0.651) and desorption coefficients (average $K_a$des of 1.15) indicates that this degradate may be irreversibly bound to soils and may not be as mobile as one would predict from the adsorption results alone.

Water Resources Assessment Summary

Tier I surface and ground water estimated environmental concentrations (EEC) were generated using EFED GENEEC (Generic Expected Environmental Concentration) and SCI-GROW (Screening Concentration in Ground Water) models, respectively. The application information was based on hop crop, since hops has the highest use rate among all existing uses (15 applications per year and 0.65 lb ai/A per application at 14 day interval). A detailed drinking water assessment report was issued by Dr. James Lin on January 13, 1998 (DP Barcode: D238936, D238937, D238939, and D238940). Based on the application rates, it is not expected that the proposed use of myclobutanil on sugar beets will result in surface and ground water EECs exceeding the values reported for hop crops (see below).

GENEEC Peak	115 ppb
GENEEC Average 56 day	92 ppb
SCI-GROW Concentrations	2 ppb

No drinking water assessment was performed on 1,2,4 triazole due to an incomplete environmental fate database for this degradate. However, the available fate data indicate that 1,2,4 triazole may not enter surface and ground water resources at any appreciable level.

Risk Assessment Summary

The risks associated with the proposed use are assessed based on myclobutanil use on asparagus. According to the "Review of New Uses for Myclobutanil" report (MWaller/TNguyen, February 07, 2000 (D260065 /D260111)), myclobutanil is applied on asparagus at a rate of 0.125 lb ai/acre, 6 applications per year, with 14 days between application. The asparagus use, which has similar application rate as sugar beets but at higher application frequency per year, did not trigger any LOC exceedance for birds, fish, small mammals or aquatic invertebrates. Thus, it is reasonable to assume that minimal risks are expected from the proposed use of myclobutanil on sugar beets in Ada, Bingham, Bannock, Canyon, Cassia, Elmore, Jerome, Gem, Gooding, Lincoln, Minidoka, Owyhee, Payette, Power, Twin Falls, and Washington counties in Idaho.

DP BARCODE: D269104

CASE: 293340 DATA PACKAGE RECORD DATE: 09/20/00
SUBMISSION: S583875 BEAN SHEET

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: EMERGENCY EXEMP ACTION: 510 SEC18-OC F/F USE
RANKING : 0 POINTS ()
CHEMICALS: 128857 Myclobutanil (ANSI)

ID#: 00ID0034
COMPANY:
PRODUCT MANAGER: 05 ROBERT FORREST 703-308-9376 ROOM: CM2 248
PM TEAM REVIEWER: DAVID DEEGAN 703-308-9358 ROOM: CM2 280
RECEIVED DATE: 08/14/00 DUE OUT DATE: 10/03/00

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 269104 EXPEDITE: N DATE SENT: 09/20/00 DATE RET.: / /
CHEMICAL: 128857 Myclobutanil (ANSI)
DP TYPE: 001
CSF: N LABEL: Y

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	9/20/00	/ /
BRAN: ERB3	9/20/00	/ /
SECT: EO	9/20/00	/ /
REVR : ~~Harry Craven~~	9/20/00	/ /
CONTR: T. Nguyen	/ /	/ /

ADMIN DUE DATE: 10/10/00
NEGOT DATE: / /
PROJ DATE: / /

* * * DATA REVIEW INSTRUCTIONS * * *

Section 18 Review -- Ecological & Fate Analysis

Idaho has requested use of myclobutanil on sugarbeets. This is the 1st sec.18 request by this (or any) state for this pesticide use.

1. Please address whether the requested pesticide use pattern is likely to result in significant adverse effects to non-target organisms, including endangered species. If adverse effects are anticipated, please identify locations and species at risk, as well as risk mitigation measures, if any are available.
2. Please address fate characteristics for myclobutanil, and indicate whether groundwater contamination is an issue that should be addressed. If it is, please identify any risk mitigation measures which may be available.
3. Drinking water numbers are NOT necessary for this action, as HED already has them.

Thanks in advance,

Dave Deegan
308-9358

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package